

## Catalogue of American Amphibians and Reptiles.

Flores-Villela, O., H.M. Smith, E.A. Liner, and D. Chiszar. 2010. *Sceloporus carinatus*.

***Sceloporus carinatus* Smith**  
**Keeled Spiny Lizard**  
**Lagartija escamosa aquillada**

*Sceloporus carinatus* Smith 1936:89. Type-locality, "near Tuxtla Gutiérrez, Chiapas, Mexico". Holotype, Field Museum of Natural History (FMNH) 32005, adult male, collected 4 September 1935 by E.H. Taylor and H.M. Smith.

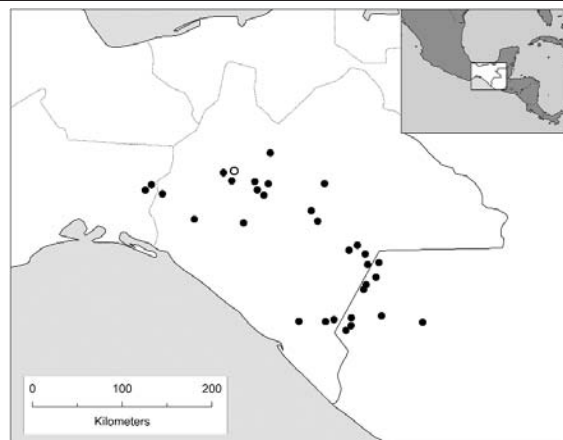
• **CONTENT.** No subspecies are currently recognized.

• **DEFINITION.** A small species, maximum known SVL ca. 80 mm (*fide* Alvarez del Toro, 1960, 1973, 1982) with the following characteristics: head scales strongly keeled; frontal ridges prominent; 2 postrostrals; 1 canthal; 2 pairs of internasals; 3 frontonasals, subequal in size, contiguous; 2 prefrontals; frontal divided, posterior part much smaller than anterior part, which is split longitudinally; 2 frontoparietals, broadly in contact; a single row of large supraoculars, only partially separated from median head scales by a single interrupted row of circumorbitals; 1 parietal on each side; dorsal scale rows 38–44; dorsal scales about twice size of the lateral scales, which are arranged in oblique rows; 8 rows of dorsals on rump; males without enlarged postanals; gular and abdominal semeions absent. The color pattern consists of indistinct dorsolateral and lateral light lines, a vertebral row of chevron-shaped dark marks on the dorsum, ground color brownish dorsally, suffused with reddish, and a pair of round, orange spots on the rear of the thigh.

• **DIAGNOSIS.** *Sceloporus carinatus* is a member of the *siniferus* species group, nearly unique in the presence of keeled preanals in females; outside of this group, only *S. ochoterenae* has that character. The species differs from all others of the genus except *S.*



**FIGURE 1.** *Sceloporus carinatus* male from Huehuetenago, Guatemala (JAC 18929, UTA Slide Collection 21062). Photograph by J.A. Campbell.



**MAP.** The circle represents the type-locality of *Sceloporus carinatus*, and the dots represent other locality records.

*squamosus* in the combination of two postrostrals, a single canthal, and lateral scales in oblique rows. It differs from the closely allopatric *S. squamosus* by having more femoral pores on each side (11–12 vs. 3–6) and more dorsal scale rows (38–44 vs. 28–37) from the occiput to the rear margins of the thighs.

• **DESCRIPTIONS.** Significant descriptions are in Smith (1936, 1939) and Köhler and Heimes (2002). The species is compared in detail with *S. squamosus* and *S. siniferus* by Smith (1991).

• **ILLUSTRATIONS.** A color photograph appeared in Köhler and Heimes (2002), black-and-white photographs in Smith (1936) and Alvarez del Toro (1960, 1973, 1982).

• **DISTRIBUTION.** Terrestrial habitats in the upper valley and headwater valleys of the Río Grijalva from extreme eastern Oaxaca and the central plateau of Chiapas to the headwater valleys of the Río Negro, Guatemala (Stuart 1963).

• **FOSSIL RECORD.** None.

• **PERTINENT LITERATURE.** General accounts are provided by Köhler (2000), Köhler and Heimes (2002), and Smith (1936, 1939). Additional literature is arranged by topic: **anatomy and morphology** (Burstein et al. 1974; Larsen and Tanner 1974; Olson et al. 1986, 1987), **biogeography and distribution** (Alvarez del Toro 1960, 1973, 1982; Alvarez del Toro and Smith 1956; Campbell and Vannini 1989; Flores-Villela 1993; Flores-Villela and Gérez 1988, 1994; Flores-Villela et al. 1991; Freiberg 1972; García 2006; Johnson 1989, 1990; Maldonado Koerdell 1953; Manrique and Manrique 1988; Savage 1966; Smith 1991; Stuart 1954a,b; Villa et al. 1988; Wilson and McCranie 1998), **phylogeny and systematics** (Etheridge 1964; Flores-Villela et al. 2000; Hall 1973; Harmon et al. 2003; Larsen and Tanner 1975; Leaché and Mulcahy 2007; Reeder and Wiens 1996; Schulte and Moreno-Roark 2010; Sites et al. 1992; Wiens 1993, 1999; Wiens and Reeder 1995, 1997; Wiens et

al. 2010; Wills 1977), **reproduction** (Fitch 1970; Guillette et al. 1980; Méndez de la Cruz et al. 1998). The species occurs in the following **checklists and similar compendia**: Bell et al. (2003), Etheridge (1960), Flores Villela et al. (1995), Frank and Ramus (1995), Hutchins et al. (2003), Liner (1994, 2007), Liner and Casas-Andreu (2008), Marx (1956), Peters and Donoso-Barros (1970), Smith and Smith (1976, 1993), Smith and Taylor (1950a,b), Smith et al. (2000), Sokolov (1988), Stuart (1963), and Taylor 1944.

• **ETYMOLOGY.** The adjectival Latin word *carinatus* means keeled, and was applied in reference to the strongly keeled scales on the dorsum.

• **ACKNOWLEDGMENTS.** We are indebted to the curators of CAS, CM, FMN, KU, LACM, MCZ, TCWC, TNHC, UAZ, UCM, UIMNH, UMM, USNM, and UTEP for information on their holdings of this species (acronyms follow Leviton et al. 1985).

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